

AMENDMENTS TO THE SPECIFICATION

Please replace the present title with the following amended title:

Please delete the fifth full paragraph on page 3.

Please replace the paragraph bridging pages 3 and 4 with the following amended paragraph:

~~In particular~~ These and other objects that appear below are achieved because, each reconfiguration request is divided into two phases: At first a “fetch-ahead” phase and then a “consolidation”. During fetch-ahead, only configuration steps essential for fast implementation of a new cross-connection are performed and security related configuration steps skipped, thereby providing reduced security against process restarts. After fetch-ahead, changes are temporarily valid in all software layers. During consolidation, those previously skipped security related configuration steps are then executed and the changes made persistent.

Please replace the last full paragraph on page 7 with the following:

The MIB is an abstraction of the resources of the network element according to an info model and has a logical view of the network element. The VHM is a software layer that has an overview over the hardware of the network element and hides hardware-specific characteristics to the MIB. The FWA is an intermediate software layer that maps the message set of the VMH to the message set of the firmware running on the SLC. The FWA can thereby support more than one message sets corresponding to different pieces of firmware or different firmware implementations. The MIB and VHM software layers each have their own persistent storage (the “Persistency”) where they store an image of their actual configuration so that after a system crash, the entire configuration of the system can be restored. Equally, the SLC has ~~[[a]]~~ its own

database where it stores its actual configuration. An overview over the layered system architecture is also given in EP 0 959 403, which is incorporated by reference herein.

Please replace the fourth full paragraph on page 8 with the following amended paragraph:

In the case of a failure, the control plane TMN needs to localize a failure by correlating received alarm reports and requests the affected network elements to switch new crossconnections to establish a dynamically calculated or pre-calculated restoration path.

Please replace the first full paragraph on page 9 with the following amended paragraph:

The major objective for path implementation is performance. Not less important is that the system reliability is not affected. To meet these opposed requirements it is basic idea of the present invention to split the processing in the network element into two phases:

- The first phase (“fetch-ahead”) is designed to minimize processing time and to implement the new paths as fast as possible. This step provides reduced security against process restarts and ignores all activities which are not absolutely necessary for path restoration.

The following second phase (“consolidation”) is executed in the traditional way, i.e., slower but secure. In nearly all cases the fetch-ahead will be successfully executed and only if an exceptional event happens, e.g. if a process crashes, it may fail ~~fall~~. Such an exception, however, will only affect the path restoration time since the following slower consolidation step will create the requested new paths, anyway.